

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

MEETING AGENDA

DATE: September 21, 1983
TIME: 9:30 a.m. to
Conclusion
ADDRESS: Assembly Room
1111 Jackson St.
Oakland, CA 94607

12:00 NOON -- PUBLIC FORUM

Any person may address the Regional Board at this time relating to any matter within the jurisdiction of the Board. This should not relate to any item on the agenda. The Chairman requests that each person addressing the Board limit himself to five minutes

1. ROLL CALL AND INTRODUCTIONS
2. MINUTES OF MEETING OF JULY 20, 1983
3. CONSIDERATION OF UNCONTESTED ITEMS CALENDAR (SEE NOTE C BELOW)

PLANS AND POLICY

4. PROPOSED POLICY STATEMENT CONCERNING THE RESULTS OF THE SAN FRANCISCO BAY SHELLFISH PROGRAM AND MEASURES NEEDED TO PROTECT SHELLFISHING.

ENFORCEMENT ACTIONS

5. LAS GALLINAS VALLEY SANITARY DISTRICT, MARIN COUNTY - HEARING TO CONSIDER REVISION OF CEASE AND DESIST ORDER.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMITS

6. INTERNATIONAL BUSINESS MACHINES CORPORATION (IBM), SAN JOSE, SANTA CLARA COUNTY - REVISION OF EXISTING NPDES PERMIT, ISSUANCE OF NEW NPDES PERMIT.
7. CITY OF CALISTOGA, NAPA COUNTY - PERMIT AMENDMENT
- * 8. PACIFIC GAS AND ELECTRIC COMPANY, (P.G.&E) PITTSBURG POWER PLANT, CONTRA COSTA COUNTY - ADDENDA TO NPDES PERMIT.
- * 9. UNION CHEMICALS DIVISION OF UNION OIL COMPANY OF CALIFORNIA, NICHOLS PLANT, CONTRA COSTA COUNTY-RECISSION OF NPDES PERMIT.

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

MEETING AGENDA

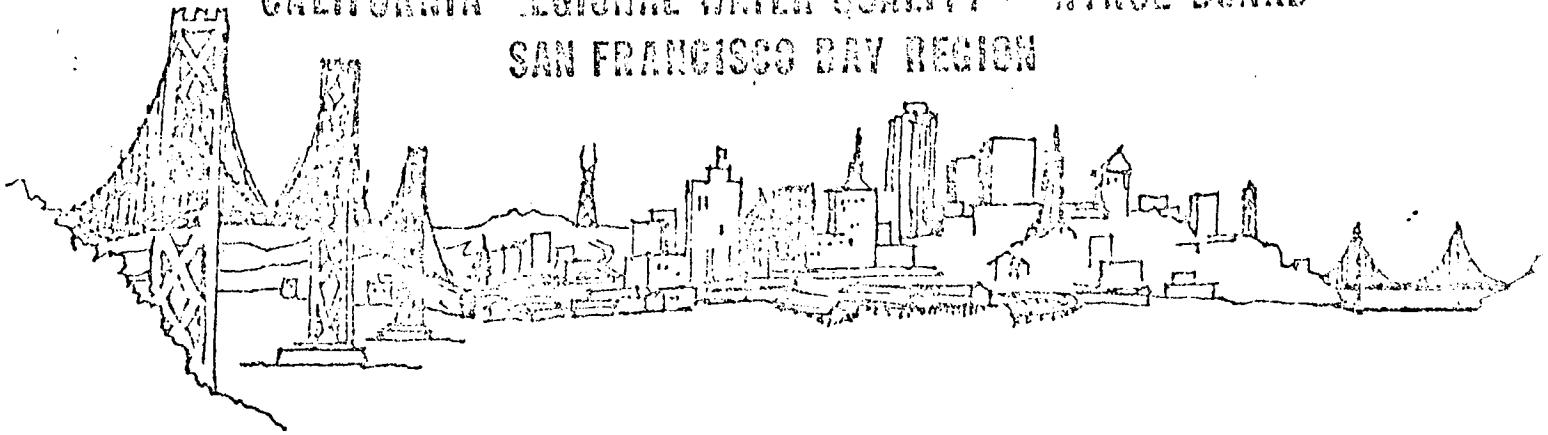
DATE: September 21, 1983
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The following item should be added to the Meeting Agenda.

*** 20A. BOARD DISCUSSION OF CASES IN LITIGATION.

*** This item will be considered in closed session
pursuant to 36 Cal. Ops. Atty. Gen. 175 (1960).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION



SAN FRANCISCO BAY SHELLFISH PROGRAM

Annual Progress Report

February 1983

The San Francisco Bay Shellfish Program studies were completed during the past year. The information collected was used by the San Mateo County Health Department, with the approval of the State Department of Health Services, to open two shellfish beds for recreational harvesting on a trial basis in August and September 1982. This was the first sanctioned harvesting in San Francisco Bay since the 1930's. The purpose of a trial opening was to assess the costs and management activities needed and to gauge public interest in recreational shellfishing in San Francisco Bay. One of the main costs of opening these shellfish beds was the frequent collection and analysis of water and shellfish meat samples for coliform bacteria to make sure the shellfish beds remained safe to use.

By all measures the trial opening was a success. Hundreds of people enjoyed a family outing in the quest for clams. No less enjoyable than a summer's morning at the shore was the consumption of these tasty molluscs later.

One of the main concerns with opening shellfish beds is that a sewage spill or wastewater treatment plant upset might occur and the County Health Department would not be promptly notified. This did not turn out to be a problem because the sewerage agencies were cooperative in fulfilling this essential communication role. Special plaudits should go to the City of San Mateo which posted and maintained signs within the shellfish bed opened at Third Avenue and to the San Mateo County Coyote Point Recreation Area personnel for distributing information on the Fish and Game Code requirements for clamming.

It is unknown whether the shellfish bed opening will be repeated next summer. The San Mateo County Health Department would like to re-open the two shellfish beds on a trial basis but budget constraints make the prospects uncertain.

The trial shellfish bed opening created confusion for some. Although the trial period ended September 30, 1982, harvesting has continued at an increased pace compared to before the opening. Another confusing point has been the assumption that because the two trial shellfish beds were safe to use other shellfish beds were also safe for harvesting. Not true! All of

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION

BOARD MEMBERS

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Philip R. Wente, Vice Chairman
Donald Anderson
Peter Y. Chiu
Barbara B. Eastman
Homer H. Hyde
Walter H. Morris

CITY OF RESIDENCE

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Moraga
Palo Alto
Los Altos Hills
Campbell
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Fred H. Dierker, Executive Officer
Roger B. James, Assistant Regional
Executive Officer
Richard H. Whitsel, Chief of Planning
Lawrence P. Kolb, Chief, North Bay Division
Teng-chung Wu, Chief, South Bay Division
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Industrial Waste Division
Richard J. Condit, Section Leader, Toxics &
Industrial Waste Division
Hobart C. Knapp, Section Leader, Toxics &
Industrial Waste Division
Lester Feldman, Section Leader, North Bay
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Bay Division
Steven I. Morse, Section Leader, South Bay
Division
Donald D. Dalke, Section Leader, South Bay
Division
Adam W. Olivieri, Section Leader, Planning
Division

OFFICE LOCATION

1111 Jackson Street, Room 6040
Oakland, CA 94607

TELEPHONE

Area Code (415) 464-1255

MEETINGS

Regular meetings of the Board are held on the third Wednesday of each month. All meetings are scheduled to begin at 9:30 a.m. Meetings are held in the Assembly Room on the first floor of the State Building, 1111 Jackson St., Oakland, CA.

GENERAL STATEMENT

The primary duty of the Regional Board is to protect the quality of the surface and ground waters within the region for beneficial uses. This duty is implemented by formulating and adopting water quality plans for specific ground or surface water bodies; by prescribing and enforcing requirements on all domestic and industrial waste discharges, and by requiring cleanup of water contamination and pollution. Specific responsibilities and procedures of the Board are outlined in the Porter-Cologne Water Quality Control Act.

The purpose of the meeting is to provide the Board with testimony and information from concerned and affected parties and make decisions after considering the recommendations made by the Executive Officer.

The Board and staff welcome information on pertinent problems, but comments at the meeting should be brief and directed to specifics of the case to enable the Board to take appropriate action. Whenever possible, lengthy testimony should be presented to the Board in writing and only a summary of pertinent points presented verbally.

RECORDS OF MEETINGS

Tape recordings are made of each Board meeting and these tapes are retained in the Board's office for two years. Anyone desiring copies of these tapes may, at their own expense, arrange to have duplicate tapes made by contacting: TRUE RECORDINGS, 3883 Piedmont Avenue, Oakland, CA 94612 - Telephone (415) 652-8863.

UNCONTESTED

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

EXECUTIVE OFFICER SUMMARY REPORT
MEETING DATE: September 21, 1983

ITEM: 16

SUBJECT: U.S. Navy - Alameda Naval Air Station Class II-2 Solid Waste Disposal Site, Alameda, Alameda County - Closure Requirements

CHRONOLOGY: The Board has not previously considered Waste Discharge Requirements for this site

DISCUSSION: The U.S. Navy owns and operated a 110 acre waste disposal site at the southwest corner of the Alameda Naval Air Station (location map in Appendix A). Of the 110 acres, approximately 63 acres were used for the disposal of wastes that were predominantly Group 2 and 3. Some Group 1 materials may also have been disposed. The remainder of the site was used for dredge spoil disposal. Disposal operations ceased in 1978.

The Navy submitted a site assessment report in March 1978, a closure report in June 1980, and a supplemental site assessment report in April 1983. The proposed closure plan does not completely conform to minimize closure requirements with respect to final cover, leachate containment and seismic hazard. In addition, the Navy is proposing to use the surface of the closed landfill as a dredge spoil dewatering area sometime after 1985.

Funds for the Closure project were originally appropriated by Congress in October 1979. They must be committed for expenditure by October 1, 1983 to avoid possible loss. Due to the time constraints regarding the expenditure of appropriated funds, and the uncertainty regarding several aspects of this project, the Navy's proposal is acceptable as an interim closure only. A more detailed discussion is contained in the attached staff report (Appendix B). The Tentative Order (Appendix A) requires that the site be closed in accordance with the closure plan. In addition, it requires the submittal of supplemental information to assess the effectiveness of interim closure measures. The results of these submittals may require additional measures to affect a final closure.

RECOMMEN-

DATION: Adoption of the Tentative Order prescribing waste discharge requirements for closure of the U.S. Navy - Alameda Naval Air Station solid waste disposal site.

File No. 2199.9080

Appendices

- A. Tentative Order
- B. Staff Report
- C. Correspondence

REPRODUCED AT GOVERNMENT EXPENSE

APPENDIX A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

TENTATIVE ORDER
CLOSURE REQUIREMENTS FOR

U.S. NAVY,
ALAMEDA NAVAL AIR STATION CLASS II
SOLID WASTE DISPOSAL SITE
ALAMEDA AND SAN FRANCISCO COUNTIES

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The disposal site is owned and was operated by the United States Navy, who will be referred to hereinafter as the discharger.
2. The disposal site occupies approximately 110 acres, at the Alameda Naval Air Station's southwest corner. Of the 110 acres, approximately 63 acres have been filled with refuse. The site is bordered on the south and west by both the San Francisco Bay and a dredge spoils disposal area, and on the north and east by runways, as shown in Attachments A and B to this order.
3. Prior to 1925, the U.S. Naval Air Station at Alameda was an area of tidal marsh and sloughs. It is underlain by bay mud which is a soft, gray silty clay containing minor amounts of sand and shells. The bay mud tends to become firmer with depth. Sand and clay fill were placed over the mud during the period 1925 to 1929. The bottom of the younger bay mud is as deep as 80 to 100 feet. Usable groundwater aquifers in the area are artesian and are located below the Bay Mud in the lower sections of the Alameda formation. The top of bedrock is approximately 300-400 feet deep.
4. Filling began in 1956 with construction of the sea wall on the south and west sides and hydraulic placement of 15 to 20 feet of sand fill. Former landfill operations consisted of excavating 10-20 feet of hydraulic sand fill, backfilling the excavation with solid waste and the excavated sand, and covering the fill with the remaining excavated sand. Disposal of refuse ceased in 1978.
5. There is no evidence of any fault traversing the site. However, the site is located approximately six miles west of the Hayward Fault and about 12.5 miles east of the San Andreas Fault. These faults are known to be active and have been the cause of major earthquakes in the past.
6. During the landfills later years of operation only group 2 and group 3 materials were accepted. However, no records were kept during the early years of operation making it possible that some group 1 wastes were disposed on site.

A U.S. Navy authorized Initial Assessment Study of Naval Air Station, Alameda, California dated April 1983, indicates that it is highly probable group 1 waste were disposed at this site. The report indicates that the site may contain a maximum of 1.6 million tons of municipal refuse and 30,000 to 500,000 tons of hazardous waste. Naval Air Station personnel however, have indicated that they believe the group 1 wastes comprise an insignificant portion of the solid waste disposed on site. The discharger has initiated an investigation to better clarify this issue and to determine the effect or potential effect of these hazardous wastes on the shallow groundwater and water quality in San Francisco Bay. Past groundwater monitoring was not sufficient to determine if groundwater contamination from group I wastes exists.

7. In March 1978 the discharger submitted a "Sanitary Landfill Site Study" which has been augmented and updated by a June 1980 submittal entitled "Sanitary Landfill Closure Plan Naval Air Station, Alameda, California" and an April 1983 supplemental. These reports address such items as closure schemes, future uses, site geology, environmental impacts, landfill history, leachate discharges, monitoring program, and landfill management.
8. The above submittals indicate that tidal fluctuations are occurring up to 150 feet inland of the seawall, and that a discharge of 7,000 to 13,000 gallons per day of return water is occurring. This infiltration has the potential to carry leachate into waters of the State. The discharger proposes to construct as a part of closure, a slurry trench cut-off wall along the west shoreline, where the majority of the infiltration and discharge is believed to be occurring. The discharger acknowledges that the cut-off wall may not provide complete leachate containment and that further work may be necessary.
9. The Board will consider a proposal by the discharger to use the site as a dredge disposal area once the discharger has demonstrated that such operations would have no significant impacts on water quality.
10. The reports referenced in Finding 7 indicate some failure of the rock sea wall is likely to occur during a moderate earthquake. The discharger acknowledges further work may be necessary to alleviate this condition.
11. The beneficial uses of San Francisco Bay are:
 - a. Wildlife habitat
 - b. Marine habitat
 - c. Recreation
 - d. Preservation of rare and endangered species
 - e. Fish migration and spawning
 - f. Shellfish harvesting
 - g. Industrial water supply
 - h. Navigation
 - i. Commercial and sport fishing

12. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982, and this order implements the water quality objectives in that Plan.
13. Subsequent to the modifications necessary to comply with this Order, this disposal site will meet the criteria contained in the California Administrative Code, Title 23, Chapter 3, Subchapter, 15 for classification as a closed Class II disposal site.
14. The Board, has notified the discharger and interested agencies and persons of its intent to issue closure requirements for the discharger and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
15. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
16. This project involves the closure of a Federally owned Class II facility with minor alterations to the land. Consequently, this project will not have a significant effect on the environment pursuant to the exemption provided in Section 15101, Title 14, California Administrative Code.

IT IS HEREBY ORDERED THAT the U.S. Navy Alameda Naval Air Station comply with the following:

A. Prohibitions

1. The discharge of any wastes or water that has been contaminated by waste material to surface water or groundwater is prohibited.
2. No additional group 1 and group 2 wastes shall be stored or deposited on this site.
- ✓ 3. Use of this site for disposal of dredge spoils shall not commence until it is determined by the Regional Board that all measures necessary to protect water quality have been taken.
4. The treatment or storage of wastes shall not cause pollution or a nuisance as defined in Section 13050(m) of the California Water Code.

B. Interim Closure Specifications

1. (a) The disposal areas shall be provided and maintained with a final cover of at least three feet of clean soil.
(b) At least one foot of the final cover shall be compacted to attain a permeability no greater than 1×10^{-6} cm/sec.
2. All disposal areas shall be graded and maintained to prevent ponding and to provide slopes of at least three percent. Lesser slopes may be allowed if an effective system is provided for carrying off surface drainage. Steep areas, surface drainage

courses, or other areas subject to erosion by water and/or wind shall be provided with a lining, planted with vegetation, or otherwise designed and constructed to prevent such erosion.

3. A leachate cut-off barrier on the west side, as designed in the closure plan, dated June 6, 1980, shall be installed to prevent infiltration of bay waters and discharge of leachate from waste materials to waters of the state and United States.
4. The migration of methane gas from waste shall be controlled as necessary to prevent creation of a nuisance or hazard.
5. Site closure shall be designed to minimize damage to the sea wall or to the structures which control leachate, surface drainage, erosion, and due to a maximum probable earthquake.
6. The disposal areas shall be protected from any washout or erosion from inundation, which could occur as a result of tides, rainfall, or floods having a predicted frequency of once in 100 years.

C. Final Closure Specifications

1. All necessary facilities shall be provided to ensure that leachate and gases from refuse and hazardous wastes and ponded water containing leachate or in contact with refuse or hazardous wastes is not discharged to surface water or groundwaters.

D. Provisions

1. This disposal site shall be closed in compliance with this Board's Resolution No. 77-7 and in accordance with closure plans and supplemental materials indicated in Finding 7 and with any other plans required under time schedules established in this permit.
2. The discharger shall comply with all prohibitions and specifications of this Order immediately upon adoption, except for Prohibition A.1 and Specifications B.1, B.2, B.3, B.6 and C.1.
3. Compliance with selected specifications may not be necessary if future dredge spoil disposal is approved by the Board.
4. The discharger shall comply with the following time schedules to assure compliance with interim closure specifications B.1, B.2, B.3, and B.6.
 - a. To assure compliance with B.1(b):

<u>Task</u>	<u>Complete Task</u>	<u>Report of Compliance Due</u>
Complete placement of 1 foot impermeable cover	October 1, 1984	October 15, 1984 ✓

b. To assure compliance with B.1(a) and B.2:

<u>Task</u>	<u>Complete Task</u>	<u>Report of Compliance Due</u>
Complete final cover and grading	October 1, 1987	October 15, 1987

c. To assure compliance with B.3:

<u>Task</u>	<u>Complete Task</u>	<u>Report of Compliance Due</u>
Complete the west side cut-off barrier	October 1, 1984	October 15, 1984 ✓

d. To assure compliance with B.6:

<u>Task</u>	<u>Completion Date</u>	<u>Report of Compliance Due</u>
Complete sea wall repairs as described in "Sanitary Landfill Closure Plan" dated June 6, 1980	October 1, 1984	October 15, 1984 ✓

5. The discharger shall comply with the following time schedule to assure compliance with Prohibition A.1 and final closure specification C.1.

a. To assure compliance with A.1 and C.1.

<u>Task</u>	<u>Report Due</u>
Submit a detailed technical report outlining methods used to determine the stability of the rock sea wall.	December 1, 1983
Submit the results of a dynamic analysis (if required, based upon review of the above submittal).	March 1, 1984
Determine need for a cut-off wall or similar containment structure around the remainder of the site as well as any other site improvements which may be necessary. Report is to contain time schedule for funding and completion, for improvements determined to be necessary.	Jan June 1, 1985

6. Any modification in the method of closure of the landfill from that contained in the reports described in Finding No. 7 above shall be approved by this Board unless the modification provide for direct compliance with the provisions of Resolution 77-7. Such determination of direct compliance shall be made by the Executive Officer.
7. This Board considers the current property owners or any new owner to have a continuing responsibility for correcting any problems associated with this solid waste disposal site during subsequent use of the land for other purposes.
8. The discharger shall notify this Board in writing of any proposed change in ownership of this site. The current owners shall notify and provide a copy of this Order to any subsequent owner of this property or portion thereof prior to sale and submit documentation to the Board that the new owner is aware of this Order.
9. The discharger shall file with the Board any monitoring program which may be directed by the Executive Officer.
10. The discharger shall permit the Regional Board or its authorized representatives in accordance with California Water Code Section 13267(c).
 - a. Entry upon premises on which waste are located or in which any required records are kept,
 - b. Access to copy any records required to be kept under terms and conditions of this Order,
 - c. Inspection of monitoring equipment or records, and
 - d. Sampling of any discharge.

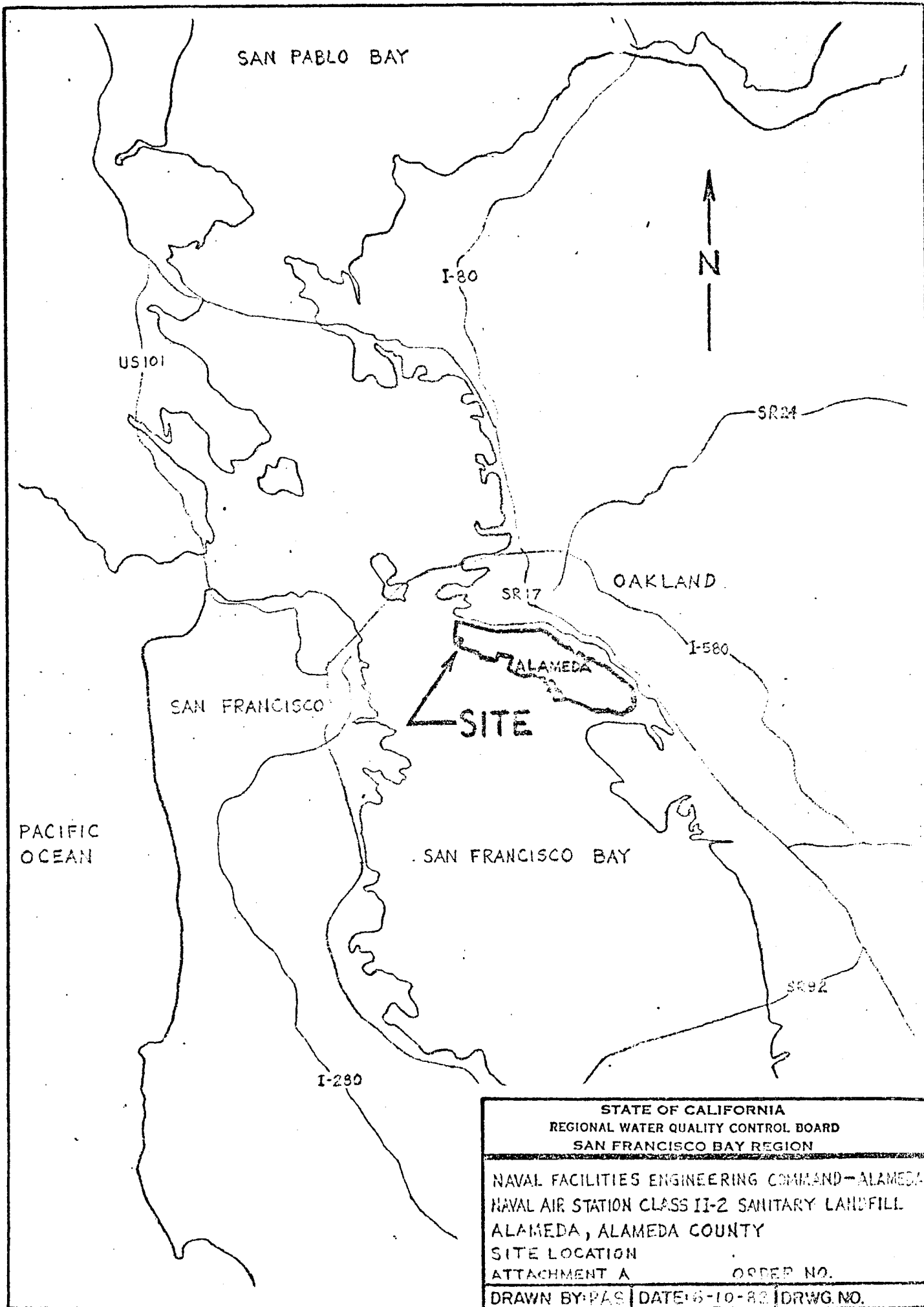
I, Fred H. Dierker, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on

FRED H. DIERKER
Executive Officer

Attachments:

- A-Location Map
- B-Site Map
- C-Resolution 77-7

ATTACHMENT A



ATTACHMENT B

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

RESOLUTION NO. 77-7

MINIMUM CRITERIA FOR PROPER CLOSURE OF
CLASS II SOLID WASTE DISPOSAL SITES

- I. WHEREAS, experience has shown that Class II solid waste disposal sites can be sources of serious water pollution problems even after their use has been terminated, unless properly closed, and
- II. WHEREAS, these problems may include: odors, discharge of leachate, exposed refuse due to inadequate cover, and ponding of refuse-polluted water on the site, and
- III. WHEREAS, Section 2535 of the California Administrative Code provides as follows:

Completion of Disposal Operations. (a) Prior to cessation of disposal operations at a waste disposal site, the operator shall submit a technical report to the appropriate regional board describing the methods and controls to be used to assure protection of the quality of surface and groundwaters of the area during final operations and with any proposed subsequent use of the land. This report shall be prepared by or under the supervision of a registered engineer or a certified engineering geologist.

(b) The methods used to close a site and assure continuous protection of the quality of surface and groundwater shall comply with waste discharge requirements established by the regional board.

(c) The owner of the waste disposal site shall have a continuing responsibility to assure protection of useable waters from the waste discharge, and from gases and leachate that are caused by infiltration of precipitation or drainage waters into the waste disposal areas or by infiltration of water applied to the waste disposal areas during subsequent use of the property for other purposes, and

- IV. WHEREAS, the establishment of minimum criteria for proper closure of Class II solid waste disposal sites is desirable to protect the quality of waters of the State and to alert site owners and operators as to their specific responsibilities, and

V. WHEREAS, pursuant to Section 15104 of the California Environmental Quality Act Guidelines, this Resolution applies to minor alterations to land which do not have significant adverse effects on the environment and is therefore exempt from the provisions of the Act.

VI. THEREFORE BE IT RESOLVED that this Regional Board establishes the following minimum criteria for proper closure and subsequent maintenance of Class II solid waste disposal site:

1. All completed disposal areas shall be compacted and provided with a final cover of at least three feet of clean soil. A lesser thickness of final cover may be allowed upon a demonstration that, due to thorough compaction of refuse or other factors, differential settlement is likely to be minimal. At least one foot of the final cover shall be compacted to attain a permeability no greater than 10^{-6} cm/sec. Exceptions to this requirement may be granted upon a demonstration that equivalent protection against water penetration may be provided by other means.
2. Completed disposal areas shall be graded and maintained to prevent ponding and to provide slopes of at least three percent. Lesser slopes may be allowed if a sewer system or other equivalent means of carrying off surface drainage is provided. Steep areas, surface drainage courses, or other areas subject to erosion shall be provided with a lining, or planted with vegetation, or otherwise designed to prevent such erosion.
3. Slopes shall be designed to minimize the potential for sliding by control of grades, drainage, or other means. Any slides observed within the disposal area shall be promptly stabilized, and the Executive Officer shall be notified immediately upon discovery of a slide.
4. All necessary facilities shall be provided to ensure that leachate from group 2 waste and ponded water containing leachate or in contact with refuse is not discharged to surface waters of the State.
5. The disposal area(s) shall be protected from any washout or erosion and from inundation, which could occur as a result of tides or of floods having a predicted frequency of once in 100 years.
6. All necessary facilities shall be provided to protect usable groundwaters from degradation as a result of leachate discharges or carbon dioxide migration.
7. The migration of methane gas from group 2 waste shall be controlled as necessary to prevent creation of a nuisance.

VII. BE IT FURTHER RESOLVED that this Board's Executive Officer will request that closure plans be submitted by operators of all Class II sites at the earliest practicable date. Closure plans will be approved by this Board by inclusion in waste discharge requirements. The Board will amend closure plans as necessary to provide for conformance with the above minimum criteria. Site closure plans shall include the following:

- a. The boundaries of areas used for waste disposal.
- b. Method of control of surface drainage flow from the site.
- c. Evaluation of the anticipated settlement due to decomposition and consolidation of the wastes.
- d. Thickness of cover and physical properties including permeability, expansion characteristics and erodibility.
- e. Relationship of waste disposal area to underlying groundwater quality.
- f. Location of groundwater monitoring points.
- g. Method for control of methane.
- h. Proposed subsequent use of the land.

VIII. BE IT FURTHER RESOLVED that this Board will normally require implementation of the site closure plan as rapidly as possible after completion of group 2 waste disposal operations at a site or portion thereof. The Board may authorize delays of specified duration in meeting final slope requirements pending determination of subsequent land use, provided interim measures are taken to protect water quality.

IX. BE IT FURTHER RESOLVED that it is the intention of this Board to take all measures practicable to ensure that subsequent owners of sites are made aware of site closure requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1977.

FRED H. DIERKER
Executive Officer

APPENDIX B – STAFF REPORT

CLASS II-2 SOLID WASTE DISPOSAL
SITE CLOSURE REQUIREMENTS

MEETING AGENDA FOR CRWQCB MEETING

DATED 21 SEPTEMBER 1983

SAN FRANCISCO BAY REGION

INTERNAL MEMO

File No. 2189.9080A (RAS)ej

TO: Fred H. Dierker
Executive OfficerFROM: Robert A. Samaniego, Area EngineerDATE: August 30, 1983SIGNATURE: SUBJECT: Alameda Naval Air Station Class II-2 Solid Waste Disposal Site

The Regional Board has not previously considered Waste Discharge Requirements for this site. Although the site has not accepted refuse since 1978, it has never been formally closed. Funds for this project were originally appropriated by Congress in October 1979. They must be committed for expenditure by the Navy by October 1, 1983 in order to avoid justification to Congress for delays with possible loss of funding.

The original funding for this project reflects what the Navy considered (with Regional Board staff concurrence) to be a complete site closure at that time. However, original staff concurrence with the Navy proposal was given in the absence of a review of the project by a State Board geologist. A subsequent review by Bud Eagle of the State Board hydrogeology staff revealed that assumptions and justifications for several aspects of this project may be questionable and would require further clarification. In addition, the Navy released a report in April 1983 that revealed that as much as 500,000 tons of hazardous waste may have been disposed of at the site. The Navy had indicated previously that only minimal quantities of hazardous waste had been disposed of at this site.

It is the Navy's position that due to the time constraints it is impossible for them to re-design their project at this late date, especially in light of the fact they would lose appropriated funds after October 1, 1983. For this reason it is the staff's position that this proposal be viewed as an interim closure only. The Navy is currently undertaking a new site assessment to account for the hazardous materials that may have been disposed of. It is understood that the results of this assessment, as well as future monitoring to assess the effectiveness of interim closure measures, may require additional containment measures. The Navy is prepared to secure additional funding as needed.

Interim Closure

The present closure plan calls for site improvements to meet minimum closure requirements with respect to grading, slope stability, 100 year flood protection and methane gas migration. A monitoring program acceptable to this Board is being developed. In addition, the plan requires the placement of one foot of relatively impermeable cover, the installation of a bentonite slurry wall along most of the western perimeter, and the construction of dikes around the entire landfill perimeter. The placement of one foot of

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cover of minimum permeability 1×10^{-6} cm/sec does not meet the requirement of a total of three feet of final cover. The Navy is proposing to use the top of the closed landfill as a dredge spoil dewatering area (the perimeter dikes mentioned above will contain the spoils). The spoils would eventually provide the landfill with six to eight feet of a low permeability cover. However, should the Navy decide not to pursue this proposal, or if the feasibility of this proposal cannot be demonstrated to the satisfaction of the Board, the final two feet of cover will be applied. This proposal will be discussed further in a separate section.

The installation of a bentonite slurry wall along most of the western perimeter is designed to control bay water infiltration and discharge from the site estimated to be between 7,000 and 13,000 gallons/day. This was required in a letter to the Navy from Regional Board staff dated July 11, 1980. However, based on comments from the State Board geologist as well as subsequent information, staff feels this measure alone may not be effective in eliminating all potential water quality impacts. The results of the site assessment as well as future monitoring will determine whether or not additional perimeter containment will be necessary.

The Navy acknowledges that some failure of the rock sea wall is likely to occur during a moderate earthquake. However, they feel the damage would not constitute a complete failure but would be limited to manageable proportions. There is disagreement between the Navy and the State Board geologist in this matter. A provision has been included in the Tentative Order requiring the submittal of a detailed technical report (to include the results of a dynamic analysis) describing the methods used by the Navy to arrive at their conclusions. This submittal as well as the results of the site assessment will determine whether or not additional shoring of the sea wall will be necessary.

Final Closure

If the Navy does not commence dredge spoil dewatering prior to October 1, 1986 (or if their proposal with a time schedule is not approved by this Board) the remaining two feet of final cover will be applied by that time. Additional measures may be required for a final closure, such as additional perimeter containment, shoring of the rock sea wall or any other measures which may be needed based on the results of a site assessment (required under time schedule) and future site monitoring.

Dredge Spoil Dewatering

The Navy is proposing to utilize the closed landfill as a dredge spoil dewatering area. They have demonstrated analytically that it is possible to manage the application of the dredge spoils such that the water will not penetrate the relatively impermeable landfill cover in the time required for dewatering. However, it is unknown at this time whether they can meet the above requirement in addition to meeting the effluent limitations of an NPDES permit for the discharge of the return water. It is the opinion of the State Board geologist that the additional load placed on the landfill by the dredge operation may decrease the stability of the sea wall. This matter has not been resolved. However, the Navy will address all of the above concerns in their formal application for an NPDES permit. The feasibility of using the landfill as a dredge spoil dewatering area will be evaluated by the staff at that time. The Tentative Order contains a prohibition with respect to using the landfill as a dredge spoil dewatering area until this proposal has been submitted and, if acceptable approved by the Regional Board.

APPENDIX C – CORRESPONDENCE

CLASS II-2 SOLID WASTE DISPOSAL
SITE CLOSURE REQUIREMENTS

MEETING AGENDA FOR CRWQCB MEETING

DATED 21 SEPTEMBER 1983

APPENDIX C - CORRESPONDENCE

CLASS II-2 SOLID WASTE DISPOSAL SITE CLOSURE REQUIREMENTS

MEETING AGENDA FOR CRWQCB MEETING

THE ABOVE IDENTIFIED APPENDIX IS NOT
AVAILABLE.

EXTENSIVE RESEARCH WAS PERFORMED BY
SOUTHWEST DIVISION TO LOCATE THIS
APPENDIX . THIS PAGE HAS BEEN INSERTED AS
A PLACEHOLDER AND WILL BE REPLACED
SHOULD THE MISSING ITEM BE LOCATED.

QUESTIONS MAY BE DIRECTED TO:

DIANE C. SILVA
RECORDS MANAGEMENT SPECIALIST
SOUTHWEST
NAVAL FACILITIES ENGINEERING COMMAND
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